Hospitals--Pollution Prevention—Web Resources

Updated: Aug. 30,2000

Sustainable Hospitals
http://www.uml.edu/centers/LCSP/hospitals/
The Sustainable Hospitals Project (SHP) provides technical support to the healthcare industry for selecting products and work practices that eliminate or reduce occupational and environmental hazards, maintain quality patient care, and contain costs.
Date: 1998
Resource type: Web site

Environmentally Preferable Purchasing How to Guide
http://www.geocities.com/RainForest/Wetlands/7756/EPP1.htm
Source: Hospitals for a Healthy Environment
Date: not available
Resource type: Guide
This web-based guide introduces EPP, describes why hospitals should be doing EPP, and takes a hospital from EPP term formation to the completion of a pilot EPP project. The guide also includes information on overcoming obstacles, tracking success, creating publicity, negotiating with Group Purchasing Organizations, and evaluating the validity of vendor claims.

Hospitals and Pollution Prevention
Source: Ohio EPA Office of Pollution Prevention
URL: http://www.epa.state.oh.us/opp/hospital.html
Description: This is the web site for the Ohio EPA page on Hospitals and P2. Contains links to other resources.
Resource type: web site
Date: not available

Medical Facility Waste
http://sbeap.niar.twsu.edu/docs/medwaste/main.html
This pamphlet summarizes the new source performance standard (NSPS) for new and reconstructed Hoptial/Medical/Infectious Waste Incinerators (HMIWI) and the guidelines for existing HMIWIs, provides an overview of hazardous waste regulations, and discusses pollution prevention as a way to reduce regulatory burdens and costs.
Source: Kansas Small Business Environmental Assistance Program (Kansas SBEAP)
Date: 1998
Resource type: Article

"Greening" Hospitals: An Analysis of Pollution Prevention in America's Top Hospitals
http://www.ewg.org/pub/home/reports/greening/greening.pdf
Source: Environmental Working Group/The Tides Center
Date: Copyright 1998 (we are seeking permission to link to this document)
Resource type: Report

First Do No Harm: Reducing the Medical Waste Threat to Public Health and the Environment
http://www.ewg.org/pub/home/HCWC/DoNoHarm/FullReport.pdf
Source: Environmental Working Group? The Tides Center
Date: Copyright 1997 (have sent for copyright permission to link to this document)
Resource type: Report

Guides to pollution prevention for selected hospital waste streams
Source: US Environmental Protection Agency Office of Enforcement and Compliance Assistance (OECA)
http://es.epa.gov/oeca/fedfac/fflexp2/hospital.html
This guide provides an overview of hospital waste generating processes and presents options for minimizing waste generation through source reduction and recycling. Reducing the generation of these materials at the source, or recycling the wastes on or off site, will benefit hospitals by reducing disposal costs and lowering the liabilities associated with hazardous waste disposal.
Date: 1998
Resource type: Article

Guides to pollution prevention selected hospital waste streams
EPA/625/-20/009 June 1990
http://www.cepis.org.pe/eswww/fulltext/repind62/gpp/gpp.html
Source: Risk Reduction Engineering Laboratory Center For Environmental Research Information Office of Research and Development U.S. Environmental Protection Agency
Cincinnati, Ohio 45268
This guide provides an overview of hospital waste generating processes and presents options for minimizing waste generation through source reduction and recycling. Reducing the generation of these materials at the source, or recycling the wastes on or off site, will benefit hospitals by reducing disposal costs and lowering the liabilities associated with hazardous waste disposal.
Date: 1998
Resource type: Report

Health Care Without Harm Web site
http://www.noharm.org/
Health Care Without Harm seeks environmentally responsible practices within the healthcare industry. The site contains information about recent HCWH activities concerning medical products containing PVC and mercury.
This site has a database on it.
Date: 2000
Resource type: Web site
Source: Health Care Without Harm

Memorandum of Understanding Between the United States Environmental Protection Agency and the American Hospital Association
www.epa.gov/glnpo/toxteam/ahamou.htm
Source: United States Environmental Protection Agency (EPA)
Date:1998
Resource type: Fact sheet
This document is an agreement between the EPA and the AHA in which both parties agree to work toward the minimization of persistent, bioaccumulative, and toxic pollutant production and the reduction of total waste generation by the healthcare industry.

Pollution Prevention for Hospitals & Medical Facilities
URL: http://www.p2pays.org/ref/04/03259.pdf
Date: 1994
Source: Palo Alto Regional Water Quality Control Plant
An easy to read yet detailed guide to hospital wastes with separate sections for medical facilities and medical laboratories. This document is useful for identifying the area of a hospital that may be the source of a particular wastewater contaminant. Also contains useful info on water conservation. Many of the pollution prevention tips for selenium are of interest primarily to the western U.S.

Pollution Prevention Guide for Hospitals (Excluding Medical Wastes)
URL http://www.p2pays.org/ref/03/02116.pdf
Date: 1998
Source: California Environmental Protection Agency
This guide was developed by the California Office of Pollution Prevention and Technology Development to assist general medical and surgical hospitals in evaluating their operations for waste minimization opportunities.

Laundries in State-Operated Hospitals are "Cleaning Up" With Ozone Technology
URL: http://www.p2pays.org/ref /03/02345.pdf
Date: 1999
Source: Pollution Prevention Virginia
Section Author: Sarnecky, Bill
This article shows how some hospitals in Virginia are using Ozone Technology in their laundries to reduce pollution.

Pollution Prevention Handbook - Hospital, Clinical, and Veterinary Care
URL: http://www.p2pays.org/ref /04/03242.pdf
Source: Department of the Interior - Office of Environmental Affairs
Although you may not realize it, many of the activities that take place at your facility may pollute the environment and waste money.

Source Reduction - A Hospital Case Study - Itasca Medical Center
URL: http://www.p2pays.org/ref /04/03237.pdf
The Itasca medical Center is a 108-bed community hospital with an attached 35 bed convalescent nursing care facility. The hospital staff made a commitment to source-reduce the hospital's waste as much as possible.

Advanced Hospital Recycling
URL: http://www.p2pays.org/ref /02/01242.pdf
Date: 1994
This article discusses how a Vermont hospital, with no budget for recycling, set up a self-sustaining, money-saving system for organics collection and composting. The article includes the motivating factors and cost savings for various areas of the hospital.
Section Title: North Carolina Baptist Hospitals

Case Study - McPherson Hospital: Waste Consciousness Leads to the Return of Washable Dishes
URL: http://www.p2pays.org/ref /01/00138.pdf

Date: 1996
Source: MI Department of Environmental Quality
This case study describes how one hospital reduced waste by switching from disposable to non-disposable dishware. Other examples of source reduction and reuse implemented by the hospital are also discussed.

Fletcher Allen Health Care
URL: http://www.p2pays.org/ref/04/03039.pdf
Date: 1998
Source: US Environmental Protection Agency
This is an effective case study for demonstrating the feasibility of hospital food waste reduction. This 500-bed hospital delivers 90% of it's food preparation scraps and steam table leftovers to an off-site composting facility. The hospital also donates produce to a food bank. Its food discard recovery program saves approximately $1400 per year in landfill fees.

Hospitals Prescribe P2 Measures for the Environment
Source: Kansas State University Pollution Prevention Institute
http://www.oznet.ksu.edu/dp_nrgy/ppi/publications/hospital.pdf
This document gives ideas employed by hospitals on how they can prevent pollution.
Four brief case studies are included. Includes bibliography. Length: 4 pages.

Medical Waste Incinerators Regulatory Manual
Source :Kentucky Pollution Prevention Center University of Louisville
Resource type: Manual or handbook
http://www.kppc.org/Publications/manuals/mediwaste.html
This manual will help you understand the regulations being developed by EPA regarding emissions from medical waste incinerators. It provides an overview of the regulation including its history and development; as well as presenting EPA's current thinking on how to regulate MWIs, information on emission limits, and the mandatory components of the regulation.
Date: not available

Dioxin Prevention and Medical Waste Incinerators
http://132.198.220.45:443/hlthcare/impact/medlwaste.html
Authors: Joe Thornton, Michael McCally, MD PhD, Peter Orris, MD MPH, Jack Weinberg
Source: Public Health Reports July/August 1996 - Volume III
Resource type: Report
Medical waste incineration is the largest identified source of dioxins. Polyvinyl chloride (PVC) plastic, as the dominant source of organically bound chlorine in the medical waste stream, is the primary cause of "iatrogenic" dioxin produced by the incineration of medical wastes. Health professionals have a responsibility to work to reduce dioxin exposure from medical sources. Health care institutions should implement policies to reduce the use of PVC plastics, thus achieving major reductions in medically related dioxin formation.

A New Prescription: Pollution Prevention Strategies for the Health Care Industry
Wednesday, October 7, 1998
Boston University Corporate Education Center
Tyngsborough, Massachusetts
http://www.magnet.state.ma.us/ota/pubs\MedP2wrkshp.htm
Resource type: Proceedings
Date: 1998

Conference attendees learned how pollution prevention strategies can improve environmental operations and compliance at health care, clinical laboratory and dental facilities. Experts in medical waste and pollution prevention spoke about problems and solutions they encountered in reducing toxics use in their facility, how they implemented new management strategies, and provided information about alternative products and equipment. Environmental and safety regulations and the economic benefits of pollution prevention were also discussed.

A Guide for Dental Programs: Environmental Management and Pollution Prevention
http://www.wa.gov/ecology/biblio/97413.html
This publication gives guidance on how to handle dental wastes, and provides management options for select dental wastes.
Resource type: guide
Source: Washington State Department of Ecology
Date: 1997

Voluntary Partnership with the American Hospital Association to Reduce Hospital Waste
Source: USEPA Office of Pollution Prevention and Toxics
http://www.epa.gov/opptintr/p2home/ahafact.htm
Date: 1999
Resource type: Fact sheet

Staten Island University Hospital Waste Prevention Case Study
The Staten Island University Hospital embarked on a large-scale waste prevention program, targeting 56 waste prevention and energy conservation strategies for implementation at its North and South sites. Many of the strategies also address activities and procedures in place at some, or all of the 28 clinics and other buildings operated by the Hospital. Staten Island University Hospital initiated the waste prevention program in 1994 and adopted an Integrated Waste Management Plan in August 1997.
URL: http://www.nycwasteless.com/Casestudies/statencase.htm
Source: NYC Waste Less (New York City Department of Sanitation)
Resource type: Case study
Date: 2000

For a detailed account of the Staten Island University Hospital's waste prevention and energy conservation programs:
http://www.nycwasteless.com/Casestudies/hospital/SIU-R4.htm

Jacobi Medical Center Waste Prevention Case Study
The Jacobi Medical Center has implemented fourteen successful waste prevention and energy conservation strategies. During the first four years of their waste prevention program (1991-1995), the Hospital's implementation of waste prevention measures resulted in cost savings that equaled 31% of their annual waste management operational costs, reducing their annual costs from $1,027,000 to $709,000. This level of cost savings was achieved through the reduction of waste quantities from a total of 5,478,000 pounds per year to 5,008,000 pounds per year. The following year, the hospital achieved an additional 25% waste reduction, from 5,008,000 pounds per year to 3,778,000 pounds per year, resulting in an 18%, or $126,363, further cost reduction (from $709,000 to $582,637 per year). In addition, energy cost savings have resulted in $323,500 in annual energy cost savings.
http://www.nycwasteless.com/Casestudies/jmccase.htm
Source: NYC Waste Less (New York City Department of Sanitation)
Resource type: Case study
Date: 2000

For a detailed account of the Jacobi Medical Center's waste prevention and energy conservation programs:
URL: http://www.nycwasteless.com/Casestudies/hospital/JMC-FIN.htm

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Health Care Without Harm Model Language Regarding The Purchasing Of Medical Products Containing Polyvinyl Chloride, Phthalates And Other Environmentally Harmful Substances January 5, 1999 Final Draft
URL:
http://www.noharm.org/library/admin/uploadedfiles/MODEL_LANGUAGE_REGARDING_THE_PURCHASING_OF_MED.htm
Source: Health Care Without Harm
Date: 1999
Resource type: Report
This document contains model language for hospitals and general purchasing organizations to utilize in the acquisition of medical supplies. The purpose of the language is to shift the procurement process away from the use of products containing polyvinyl chloride, phthalates (including DEHP), and other materials believed to cause harm to the environment or public health.

Model State Regulations for Medical Waste Incinerators
URL:
http://www.noharm.org/library/admin/uploadedfiles/Sample_Model_State_Regulations_for_Medical_Was.htm
Source: Health Care Without Harm
Resource type: Article
Date: not available

PVC Alternatives
URL: http://www.noharm.org/library/admin/uploadedfiles/PVC_Alternatives.pdf
Source: Health Care Without Harm
Resource type: Fact sheet
Date: 1998

Guidelines for Optimizing Waste Segregation
Source: Healing the Harm, Section Five: “Reducing and Segregating the Health Care Waste Stream
URL: http://www.noharm.org/library/admin/uploadedfiles/Guidelines_for_Optimizing_W.htm
Resource type:
Date: not available

Healing the Harm
http://www.sustain.org/hcwh/hcwhmanual/hthtoc.html
Source: Health Care Without Harm
Resource type: Manual or Handbook
Date: 1997

Environmental Implications of the Health Care Service Sector
http://www.noharm.org/library/admin/uploadedfiles/Environmental_Implications_of_theHealth_Care_S.pdf
Date: October 1999
Source: Resources for the Future

Resource type: Report